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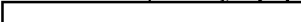
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Declass Review by NIMA/DOD

6 May 1965

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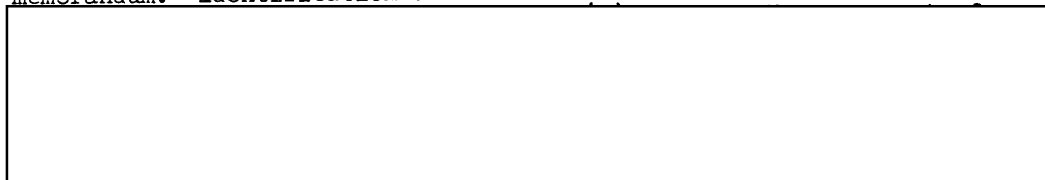
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
MEMORANDUM FOR: NSA/TCO 25X1A
ATTENTION : 
THROUGH :  NSA/LO/NPIC
SUBJECT : Search for Mining in the Ch'u-hsien Region, China
REFERENCE : NSA Requirement 
(NPIC Project 35031-5)

1. This memorandum is in response to your requirement on a search for mining in the Ch'u-hsien region, China. Good quality photography of the Ch'u-hsien region, Chekiang Province, China, was examined for evidence of mining within a radius of 25 nautical miles (nm) of the city of Ch'u-hsien.

2. Two nm NW of the town of Tu-tse-chen and 12 nm NNE of Ch'u-hsien a small well-guarded mining district, together with a small mill, is located on a mountain slope above the village of Shan-chiao-k'ou at 29-09N/118-55E. An annotated photographic enlargement of the Shan-chiao-k'ou mining district accompanies this memorandum. Identification of the Shan-chiao-k'ou mining district

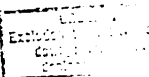
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The Shan-chiao-k'ou mining district is located on a rather inaccessible mountain slope served by a single mountain road guarded by a check point and higher up, a gate. The ores or concentrates are lowered by a steeply inclined railway to a simple receiving building below. The mining district is compartmentalized into (1) a higher area undergoing trenching, drilling, and pitting; and (2) a lower area having three small adit (tunnel) type mines, and a small barrack-like dust covered mill. A centrally located observation post was built during  to overlook the two areas. The road which runs northward and up the narrow valley from the Shan-chiao-k'ou also has at least two possible check points.

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Photography of the Shan-chiao-k'ou mining district was poor prior to [] which indicated that milling of the ores had commenced in a small way. Mining had possibly begun one or two years earlier. The pattern of the various workings indicates that five or more NE-SW trending veins are crossed by less well mineralized NW-SE shorter veins. The total amount of ore treated by crushing and mechanical separation is estimated to be roughly 20,000 short tons. The absence of stocks of mining supplies for a high-priority product, suggests that ore reserves are limited, a situation that warrants the observed active and continued surface prospecting. The ultimate destination of the ores and concentrates is unknown, but presumably they are trucked downward and southward to rail shipment points along the Ch'u-hsien -- Chin-hua railway.

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An area of prospecting near Ta-ch'a-yuan, 28-50N/118-59E, 9.5 nm SE of Ch'u-hsien, was identified as another activity of an element of the 608 Unit of the Third Bureau of the Second Ministry of Machine Building during [] 3/. The long trenches on NNW-SSE trending veins, an unsecured open pit, and the general absence of close security is suggestive of the occurrence of fluorite, 4/ and that uranium is not being mined in appreciable quantities. Fluorite, as a source of hydrofluoric acid, would be of important secondary interest to the Chinese atomic energy program.

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3. South of Teng-chia, 28-52N/119-01E, 10 nm SE of Ch'u-hsien, drilling has apparently stopped on possibly similarly mineralized veins. A similar stoppage of drilling and trenching has occurred on long veins at Ling-shan-chen, 28-51N/119-11E, 19 nm SE of Ch'u-hsien and 11 nm south of Lung-yu. As a consequence of this reduction of drilling in these two areas drillers would be available in mid-[] for transfer from the Lung-yu region to the general area of Chengtu, Ssuehuan. 5/

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4. Prior to [] the Chu-hsien region was not well covered by aerial photography. Photography used in this search is as follows:

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Maps:

AMS. Series L 500, scale 1:250,000, Sheet NH 50-11, Jan 1958. (uncl)
Sheet NH 50-12, Aug 1957. (uncl)
Sheet NH 50-15, Apr 1959. (uncl)
Sheet NH 50-16, Apr 1959. (uncl)

Documents:

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1. 3/0/CCAE/T21-62, TOP SECRET [redacted]
2. YEH, SS and CHIANG, Y., Geological map of Chu-hsien, southwestern Chekiang, scale 1:150,000, in Geology of the coal fields of southwestern Chekiang: Geological Survey Kwantung & Kwangsi, Annual Report for 1929-30, 1930 (Unc)
3. 3/0/CCY/T 35-60, TOP SECRET [redacted]
4. Juan, V.C. Mineral resources of China, Economic Geology, v 41, No 4, pt 2, p, 459, June-July 1946, (Uncl)
5. 3/0/CCY/R3-65, TOP SECRET [redacted]
5. This project is considered to be complete.

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[redacted]
Colonel, USA

Assistant for Photographic Analysis, NPIC

Enclosure:

1 Graphic

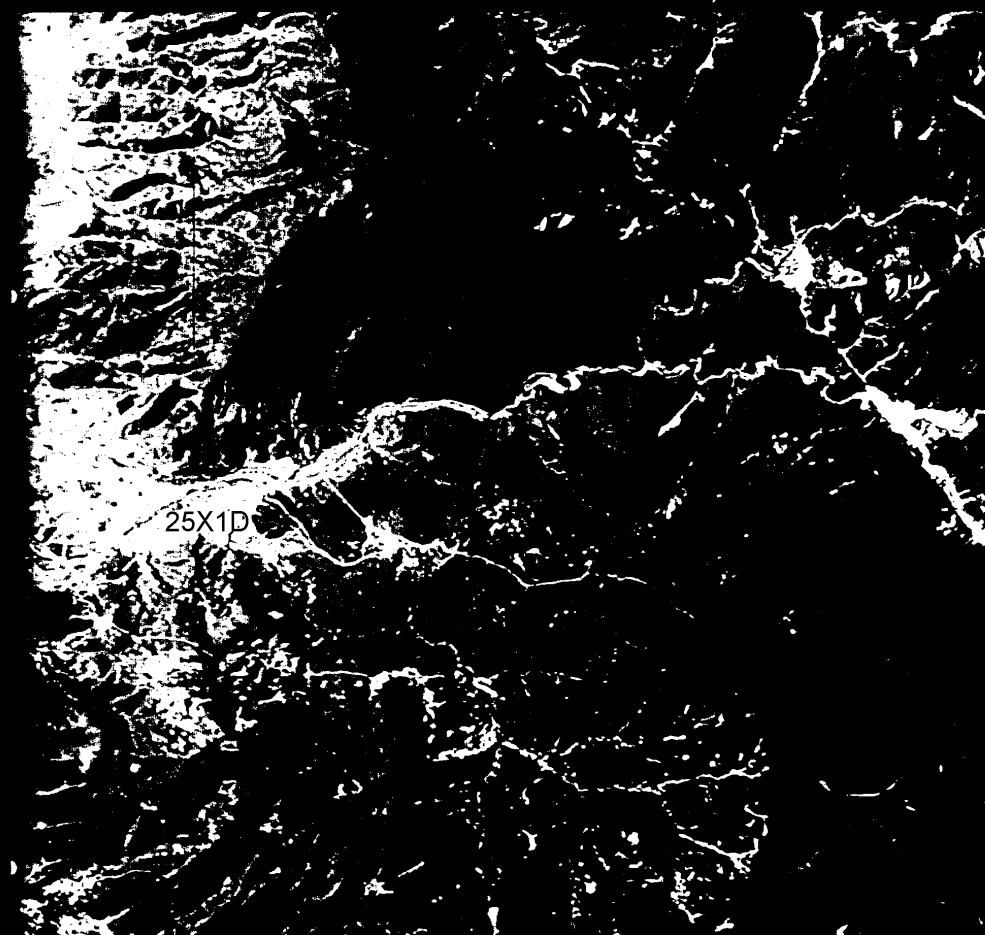
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11-AFWIE-BA (Lt Col [redacted] (w/o enc)
12-OPNAV 922Y3 (Cdr [redacted] (w/o enc)
13-Army/SPAD (Maj [redacted] w/o enc)
14-DIAXX-3A (w/enc)
15-DIAXX-3C (w/enc)

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